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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,813	02/27/2004	Stefan Biedenstein	13911-105001 / 2004P00005	5651
32864	7590	07/26/2006	EXAMINER	
FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			BELL, CORY C	
			ART UNIT	PAPER NUMBER
			2164	

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/789,813	Applicant(s) BIEDENSTEIN ET AL.	
	Examiner Cory C. Bell	Art Unit 2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Claims 1-14 have been examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Analysis and Application of Adaptive Sampling”, known hereafter as Lynch, in view of US 6434545, known hereafter as MacLeod.

- a. *As per Claims 1 and 8, they are rejected for the following reasons:*
 - i. *Lynch teaches, a data repository, wherein the data repository is configured to store a data set;*[Page 260 col 2 para 1] *and a program for executing queries on the data repository;*[Inherent feature in order to get query sizes] *wherein the program is operative to: receive a query, adapted for execution on a data set in the data repository;* [Page 260 col 2 para 1] *define a sample of the data set, wherein the sample is a subset of the data set;*[Algorithm 8, Random, and section 4] *execute the query on the sample;*[Calculating the size of the query over the sample requires running the query on the sample] *generate an estimate of a result of the execution of the query on the sample;*[Algorithm 8, return and Section 4]
 - ii. Lynch fails to expressly disclose providing the estimate to a user interface.

iii. Macleod teaches displaying the estimated cost of performing a query in col 7 lines 56-61.

iv. Thus, it would have been obvious to one of ordinary skill in the art to include the feature of Macleod in Lynch as it provides an aid to the queries submitter to improve query performance(col 2 lines 33-37 of Macleod).

b. *As per Claims 2 and 9*, they are rejected for the following reasons:

A method of executing a query in accordance with claim 1, wherein the query includes criteria to provide the result of the execution of the query. [Lynch Pg 260, para 3 deciding if a query is feasible is a criteria to provide the result of a query as a system would inherently not execute a query that is not feasible]

c. *As per Claims 3 and 10*, they are rejected for the following reasons:

A method of executing a query in accordance with claim 1, wherein providing the estimate comprises displaying a representation of the estimate. [Macleod teaches displaying the estimated cost of performing a query in col 7 lines 56-61]

d. *As per Claims 4 and 11*, they are rejected for the following reasons:

v. *Lynch teaches*, A method of executing a query in accordance with claim 1, the method further comprising: defining an Nth sample of the data set,(See Algorithm 8 the Nth sample being the sample after m iterations of the do-until loop) wherein the Nth sample is larger than an (N-1) th sample(the sample grows with each repetition with the edition of the new random subset); executing the query on the Nth sample;(the query is inherently executed on the sample to get

the size of the sample) generating an Nth estimate of the result based on the execution of the query on the Nth sample;(return nS/m)

vi. Lynch fails to expressly disclose providing the estimate to a user interface.

vii. Macleod teaches displaying the estimated cost of performing a query in col 7 lines 56-61.

viii. Thus, it would have been obvious to one of ordinary skill in the art to include the feature of Macleod in Lynch as it provides an aid to the queries submitter to improve query performance(col 2 lines 33-37 of Macleod).

e. *As per Claims 5 and 12*, they are rejected for the following reasons:

Lynch does not cancel or modify the within a preset time.

f. *As per Claims 6 and 13*, they are rejected for the following reasons:

Algorithm 8 shows that each the Nth(or mth in the reference) sample grows by the factor of n over the (N-1)th (m-1 in the reference) sample.

g. *As per Claims 7 and 14*, they are rejected for the following reasons:

An information management system in accordance with claim 11, wherein the program is further operative to: if the Nth sample is greater than or equal to a size Z, execute the query on the data set to generate the result, and provide the result of the query execution to the user interface.(Algorithm 8, until step)


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cory C. Bell whose telephone number is (571) 272 2736. The examiner can normally be reached on m-f 8:30-5:00.

Art Unit: 2164

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272 4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SAM RIMELL
PRIMARY EXAMINER